## WHAT IS CLAIMED IS:

1. A method of determining the size of particles in a particle sample, said method comprising the steps of:

providing a sample chamber;

providing a laser light source that produces a beam of laser light;

passing said particle sample into said sample chamber;

subjecting said particle sample to centrifugal force while in said sample chamber;

directing said beam of laser light into said sample chamber, wherein said beam of laser light is diffracted by at least one particle contained in said particle sample, therein causing diffracted light to emanate from said sample chamber;

providing at least one detector that converts light into corresponding electronic signals, wherein at least some of said diffracted light is received by said at least one detector array;

determining the size of said at least one particle that caused said diffracted light by analyzing said electronic signals generated by said at least one detector array.